**Auto\_LSTM**

**Automation with LSTM Network**

* In my Python installation, couldn’t find keras, but if it worked for you, should be fine.
* Can you add buttons like doPython button for the parts with COM interface so that the code could run without error if a TCLab is not connected? You can tell users to check the boxes if they have a TCLab and want to run the script with the TCLab.
* Maybe you can add doc link of <https://www.mathworks.com/help/stats/fsrmrmr.html>. I think this function wasn’t used before.
* Seems like Run Controller with the LSTM part requires physical TCLab. If that’s the case, you can indicate it in the text at the beginning. Is it there a way to run the controller piece without the actual hardware?
* I’m not sure whether it is useful here as PID function looks simple enough, but there are PID tuners in MATLAB <https://www.mathworks.com/help/control/pid-controller-design.html?s_tid=CRUX_lftnav> and Tune PID Controller Live Task
* There are big blocks of code, maybe you can turn comments into text and break the code blocks into smaller pieces. Not a huge deal.

**Concrete Strength**

* Line 191 – “no idea how to do this”? what were you trying to do? Did you figure it out? If yes, you can remove the comment.
* What are axis labels in PCA plot?
* You can add pca doc link <https://www.mathworks.com/help/stats/pca.html>
* You can tell in the text that violin function came from File Exchange. In the code I see that you are downloading it.
* Do we have answer to the question in the bonus activity? “Are they different? If so, how and why?”

**Deep Learning**

* You can put a button to this one for running Python section as well (see Auto\_LSTM do Python button). For me, Python piece errored saying “cv2” Python module not found, but if it is fine on your end, good. Adding the button may help in skipping MediaPipe part and run the code without error if someone doesn’t have Python pieces set up.

**HandTracking**

* Sounds like files are not added to the project, I got the error message below:

A screenshot of a computer

Description automatically generated

* You can clean this link, you don’t need the part after html <https://www.mathworks.com/help/vision/ug/train-a-cascade-object-detector.html#btu4ayz-1>
* **You** can add some description to the links like

<https://matlabacademy.mathworks.com/details/simulink-onramp/simulink>

<https://www.mathworks.com/products/simulink.html>

Simulink Onramp – free, self-paced online tutorial to get started with Simulink.

Simulink Product Page

* You can replace “predesigned example” with “documentation example”
* The link for Simulink doc example is not correct, it takes to color thresholder app, not Simulink doc. This is the Simulink example: <https://www.mathworks.com/help/vision/ug/tracking-based-on-color.html>
* You can write that in Simulink model, Video Source Block needs to be modified for the correct video input. The way to adjust it is as follows:

On the very left (the first block in the main model), you will see “Video Source”. Double click on it a nd go to “From Video Device” in this subsystem and adjust it to your webcam. If you don’t get good results, try different video formats. For me, it worked with YUY2-320X240 and output color space rgb.

**KNearest Neighbors**

You can hyperlink function doc links for the functions you mentioned above line 27. The rest is fine.

**Adaboost Classification**

Good

**ARX\_time Model Mod**

A screen shot of a computer

Description automatically generatedI got error with Python bit, maybe adding a button to Run Python may help in skipping errors cause by Python

**Computer Vision Intro**

Break didn’t release the camera for me. I wonder whether it would be a better way to handle if you put time cap for video capture. See here: <https://www.mathworks.com/matlabcentral/answers/1912730-using-webcam-to-record-a-specific-length-of-video>

**Deploy**

Text part of this is very Python heavy. It doesn’t talk about deployment in MATLAB. Maybe you can move the parts from further reading to the main text.

If you want to mention MATLAB Deep Learning Containers, more information is available here:

<https://www.mathworks.com/help/cloudcenter/ug/matlab-deep-learning-container-on-docker-hub.html>

You can also link these:

Videos about deployment with MATLAB:

<https://www.mathworks.com/videos/when-matlab-algorithms-leave-their-development-environment-1677475686320.html>

<https://www.mathworks.com/videos/deploying-your-models-1567682017593.html>

<https://www.mathworks.com/videos/developing-and-deploying-machine-learning-solutions-for-embedded-applications-1572007251115.html>

Relevant Product Pages for packaging apps and creating software components

<https://www.mathworks.com/products/compiler.html>

<https://www.mathworks.com/products/matlab-compiler-sdk.html>

**Lithium Ion Batteries**

Looks good now

**Logistic Regression**

I think we discussed replacing fitcecoc with a different function? Please check earlier feedback docs.

**LSTM Network**

Good

**Wind Power**

If econometrics toolbox is required, you can add it to the list at the top

Can you add some interpretations? Many large code blocks with very little explanations

Errored in line 122

**XG\_Boost Classifier**

Good

**XG\_Boost Classifier**

Good